

ABSTRACT

The present invention is directed to methods and compositions for the use of microsphere arrays to detect and quantify a number of nucleic acid reactions. The invention finds use in genotyping, i.e. the determination of the sequence of nucleic acids, particularly alterations such as nucleotide substitutions (mismatches) and single nucleotide polymorphisms (SNPs). Similarly, the invention finds use in the detection and quantification of a nucleic acid target using a variety of amplification techniques, including both signal amplification and target amplification. The methods and compositions of the invention can be used in nucleic acid sequencing reactions as well. All applications can include the use of adapter sequences to allow for universal arrays.